A copper chromita catalyst having a final [the] molar composition

 $Cu_{(a)}Cr_{(b)}Al_{(c)}Zn_{(d)}$

wherein

$$a = 10 - 40 \text{ mole } \%$$

$$b = 10 - 40 \text{ mole } \%$$

$$c = 10 - 30$$
 hapole %

$$d = 5 - 40 \text{ mole } \%$$

and a + b + c + d = 100



and having an intermediate molar composition before calcination and reduction

of about
$$Cu + Cr = 50 \text{ mol}\%$$
, $Z_1 = 20 \text{ mol}\%$ and $Al = 30 \text{ mol}\%$

and having an XRD pattern as shown in table 1

Table I. XRD analysis of the copper chromite catalyst

θ	Intensity (%)
18	100 \
26.2	100
27.4	48
35.8	92
44.2	48 . \
56.6	48 44

Claim 2 (twice amended)

A process for the preparation of a copper chromite catalyst having a final [the] molar composition

 $Cu_{(a)}Cr_{(b)}Al_{(c)}Zn_{(d)}$

wherein

$$a = 10 - 40 \text{ mole }\%$$

$$b = 10 - 40 \text{ mole }\%$$

$$d = 5 - 40 \text{ mole } \%$$

and a + b + c + d = 100

and having an intermediate molar composition before calcination and reduction of about ____ Cu + Cr = 50 mol% Zn = 20 mol% and x1 = 30 mol%

and having an XRD pattern as shown in table 1

Table I: XRD analysis of the copper chronic catalyst

θ	Intensity (%)
18	100
26.2	100
27.4	48
35.8	92
44.2	48
56.6	44

which comprises preparing an aqueous solution of a source of copper, a source of aluminium and a source of zinc, adding to this solution a solution containing a source of chromium, under stirring conditions to obtain a precipitate, separating the precipitate, drying the precipitate at a temperature ranging between 80 to 110°C, calcining the dried material in static air at a temperature ranging between 200 to 500°C for a period ranging between 2 to 5 hrs., to obtain the catalyst.